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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,691	08/20/2003	Joseph R. Zelinski	1083	6714
7590	11/08/2005			
Donald J. Ersler 725 Garvens Avenue Brookfield, WI 53005			EXAMINER AFZALI, SARANG	
			ART UNIT	PAPER NUMBER
			3729	

DATE MAILED: 11/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,691

Applicant(s)

ZELINSKI, JOSEPH R.

Examiner

Sarang Afzali

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 09112003.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (AAPA, Fig. (2)) in view of Thompson (US 3,470,690).

As applied to claim 1, AAPA (Fig. (2)) teaches a method of attaching a collector (100) to an end of a header such that it forms at least two coolant openings through at least two exhaust jacket pipes (104) of the header (a set of exhaust pipes (102) and exhaust jacket pipes (104)); providing a collector assembly having at least two jacket openings that are sized to receive two exhaust jacket pipes (104) wherein the collector assembly has a collector coolant passage area (area between inner (110) and outer (112) housings, Fig. 2) and attaching the collector housing (inner housing (110) and outer housing (112)) to the two exhaust jacket pipes (104) and flowing a coolant through the at least two coolant openings into the collector coolant passage area. AAPA discloses all claimed inventions except for the removably attachment of the collector to the header. However, Thompson teaches an exhaust header (18, Fig. 3) and a collector (12, Fig. 12) that are removably attached to each other for a detachable mounting of the adapter tubes of proper length to the main tubes (col. 2, lines 34-43). It would have been obvious to one of ordinary skill in the art at the time of invention to

modify AAPA by the teaching of Thompson in using an attachment method in order to provide an effective and proper means of removable attachment between exhaust pipes and the collector.

As applied to claim 2, Thompson further teaches the method comprising the step of providing the collector assembly (combination of collector 12, tubes 20 and flange 26, Fig. 2) with a collector housing (12, Fig. 2) and a coolant transfer plate (tubes 20 and flange 26, Fig. 2).

As applied to claim 3, AAPA further teaches that the collector housing has an inner collector housing (110) and outer collector housing (112) wherein the inner and outer collector housings are attached to the coolant transfer plate (12, 20, 26, Fig. 2).

As applied to claims 4, 12, 23, Thompson further teaches that the retention member (flange 24, Fig. 1) is attached to the ends of the exhaust jacket pipes (18, Fig. 2) and removably retains the coolant transfer plate (combination of 12, 20 and 26, Fig. 3).

As applied to claims 5, 14, 24, the AAPA/Thompson teaches all claimed limitations including the coolant transfer plate comprised of a fastener plate (flange 26, Fig. 3) and coolant passage plate (tubes 20, Fig. 3) with a coolant passage cavity (in the form of an opening in one tube 20, Fig. 2) and at least one coolant passage opening (openings in other three tubes 20, Fig. 2).

As applied to claims 6, 15, 25, Thompson teaches that at least two coolant openings (openings in two tubes 20, Fig. 2) are aligned with the coolant passage cavity (opening in the other tube 20 serving as coolant passage cavity, Fig. 2).

As applied to claims 7, 16, 26, Thompson teaches that the coolant passage plate (combination of four tubes 20, Fig. 2) is attached to a perimeter of fastener plate (flange 26, Fig. 2), such that coolant passage cavity is adjacent to the fastener plate (Fig. 2).

As applied to claims 8, 17, 27, Thompson teaches that the fastener plate (26, Fig. 3) is secured to retention member (24, Fig. 3) with two fasteners (nut and bolt assemblies 30, Fig. 3).

As applied to claims 9, 18, 28, Thompson teaches that tubes (18) and (20) are welded respectively to flanges (24) and (26) and sealing gasket (28) is used between the two flanges (24) and (26) and bolted (30) to each other to providing a fluid-tight connection (Fig. 3, col. 3, lines 43-49).

As applied to claims 10 and 19, AAPA teaches that outer flange (106, Fig. 2) is used to seal an end of each one of two exhaust jacket pipes (104, Fig. 2) to a perimeter of a single exhaust pipe (102, Fig. 2).

As applied to claim 11, AAPA (Fig. (2)) teaches a method of attaching a collector (100) to an end of a header such that it forms at least two coolant openings through at least two exhaust jacket pipes (104) of the header (a set of exhaust pipes (102) and exhaust jacket pipes (104)); providing a coolant transfer plate (combination of inner flange 108 and outer flange 106, Fig. 2) having at least two jacket openings that are sized to receive two exhaust jacket pipes (104) wherein the coolant transfer plate is attached to the two exhaust jacket pipes (104), Fig. 2) and providing a collector housing (inner housing (110) and outer housing (112), Fig. 2) with collector coolant passage area (area between inner (110) and outer (112) housings, Fig. 2) and attaching the

collector housing to the coolant transfer plate (Fig. 2) and flowing a coolant through the at least two coolant openings into the collector coolant passage area. AAPA discloses all claimed inventions except for the removable attachment. However, Thompson teaches an exhaust header (18, Fig. 3) and a collector (12, Fig. 12) that are attached to each other for a detachable mounting of the adapter tubes of proper length to the main tubes (col. 2, lines 34-43). It would have been obvious to one of ordinary skill in the art at the time of invention to modify AAPA by the teaching of Thompson in using an attachment method in order to provide an effective and proper means of removable attachment between exhaust pipes and the collector.

As applied to claim 12, Thompson further teaches that the retention member (flange 24, Fig. 1) is attached to the ends of the exhaust jacket pipes (18, Fig. 2) and removably retains the coolant transfer plate (combination of 12, 20 and 26, Fig. 3).

As applied to claim 13, AAPA teaches a collector housing having an inner collector housing (110, Fig. 2) and an outer collector housing (112, Fig. 2) and attaching the inner and outer collector housings to the coolant transfer plate (combination of inner flange 108 and outer flange 106, Fig. 2) to form the collector coolant passage area (Fig. 2).

As applied to claim 20, AAPA (Fig. 2) teaches a method of attaching a collector (100) to an end of a header such that outer flange (106, Fig. 2) is used to seal an end of each one of two exhaust jacket pipes (104, Fig. 2) to a perimeter of a single exhaust pipe (102, Fig. 2); and forming at least two coolant openings through at least two exhaust jacket pipes (104) of the header (a set of exhaust pipes (102) and exhaust

Art Unit: 3729

jacket pipes (104)); providing a collector assembly having at least two jacket openings that are sized to receive two exhaust jacket pipes (104) wherein the collector housing has a collector coolant passage area (area between inner (110) and outer (112) housings, Fig. 2) and attaching the collector housing (inner housing (110) and outer housing (112)) to the two exhaust jacket pipes (104) and flowing a coolant through the at least two coolant openings into the collector coolant passage area. AAPA discloses all claimed inventions except for the removably attachment of the collector to the header. However, Thompson teaches an exhaust header (18, Fig. 3) and a collector (12, Fig. 12) that are removably attached to each other for a detachable mounting of the adapter tubes of proper length to the main tubes (col. 2, lines 34-43). It would have been obvious to one of ordinary skill in the art at the time of invention to modify AAPA by the teaching of Thompson in using an attachment method in order to provide an effective and proper means of removable attachment between exhaust pipes and the collector.

As applied to claims 21 and 22, AAPA/Thompson teaches providing a collector assembly with a collector housing (inner housing (110) and outer housing (112), Fig. 2) attached to a coolant transfer plate (combination of inner flange 108 and outer flange 106, Fig. 2).

As applied to claim 23, Thompson further teaches that the retention member (flange 24, Fig. 1) is attached to the ends of the exhaust jacket pipes (18, Fig. 2) and removably retains the coolant transfer plate (combination of 12, 20 and 26, Fig. 3).

Art Unit: 3729

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarang Afzali whose telephone number is 571-272-8412. The examiner can normally be reached on 7:00-3:30 M-F.

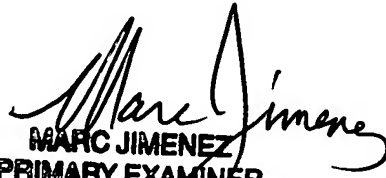
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S.A.

S.A.

11/03/2005


MARC JIMENEZ
PRIMARY EXAMINER
11/7/05